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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,518	03/29/2002	Zhiyuan Xue	220357USOPCT	4685
23850	7590	01/23/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			NILAND, PATRICK DENNIS	
1940 DUKE STREET			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			1714	

DATE MAILED: 01/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 10/088,518	Applicant(s) XUE ET AL.	
Examiner Patrick D. Niland	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(e)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet, 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet, 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-852)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

1. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The instant claim 1 recites "(composite particles)" after "inorganic solid". It is unclear if the "finely divided inorganic solid" is required to be "composite particles" or if "composite particles" refers to the "particles composed of addition polymer and finely divided inorganic particles".

B. Claims 10 and 13 recite "obtainable". It is unclear what products made by other processes are intended to be encompassed by the instant claims and it would require undue experimentation to determine what other such products the instant claims due to the use of the term "obtainable". It would require undue experimentation to determine each of the products made by all of the other possible processes which are encompassed by the instant claims. **"Obtained" is acceptable.**

The following are supporting descisions for rejecting "obtainable" and similar terms as indefinite.

1. Atlantic Thermoplastics Co. Inc. v Faytex Corp. 23 USPQ 2nd 1481 (1486).

In footnote 6, on page 1486, referring to Cochrane v Badische Aniline and Soda Fabrik (BASF), 11 US 293, the court stated "...because artificial alizarine can take different forms, BASF's claim would be indefinite unless limited to the described process".

The claim referred to is

"Artificial alizarine produced from anthracene or its derivatives by either of the methods described herein or any other method producing a like result."

2. Ex parte Tanksley 26 USPQ 2nd 1389

"A claim is indefinite if undue experimentation is involved to determine boundaries of protection".

This rationale is applicable to polymers obtainable by a stated process because any variation in any parameter within the scope of the claimed process would change the polymer produced. One who made or used a polymer made by a process other than the process recited in the claim would have to produce polymers using all possible parameters within the scope of the claims (temperature, pressure, diluents, component ratios, feed ratios, etc.) and then extensively analyze each product, to determine if his polymer was obtainable by a process within the claimed process.

3. Purdue Research v Watson 1959 CD 124 (Dist Ct) affirmed by CCPA 120 USPQ 521.

"Preparable by" was held to not particularly point out and distinctly claim the invention.

"When one has produced a composition of matter where it is not possible to define its characteristics which make it inventive except by reference to the process by which it is produced, one is permitted to so claim the composition produced by the process referred to in the claims. When the composition is thus claimed in terms of the process of its preparation, the product cannot be defined in such a manner as to assert a monopoly on the product by whatever means produced.

C. Claim 12 provides for the use of the claimed dispersion, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-7, and 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 4609608 Solc.

Solc discloses a method falling within the scope of the instantly claimed method. Solc is silent regarding the many "characteristic features" of the instant claims.

However, it would appear, based on the colloidal nature of the dispersed inorganic substance and its physical nature, along with the other similarities to the instantly claimed process of the emulsion polymerization of Solc, that these "characteristic features" are necessarily inherent to the process of the patentee. The resulting products and uses thereof fall within the scope of the instant claims 10-13. See the entire Solc reference, particularly the abstract; column 2, lines 5-27 and 57-59; column 3, lines 4-68; column 4, lines 1-26; column 5, lines 38 and 50-51; and the remainder of the document.

5. Claims 1 and 3-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 4609608 Solc.

Solc discloses a method falling within the scope of the instantly claimed method. Solc is silent regarding the many "characteristic features" of the instant claims. However, it would appear, based on the colloidal nature of the dispersed inorganic substance and its physical nature, along with the other similarities to the instantly claimed process of the emulsion polymerization of Solc, that these "characteristic features" are necessarily inherent to the process of the patentee. The resulting products and uses thereof fall within the scope of the instant claims 10-13. See the entire Solc reference, particularly the abstract; column 2, lines 5-27 and 57-59; column 3, lines 4-68; column 4, lines 1-26; column 5, lines 38 and 50-51; and the remainder of the document.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the combinations of ingredients, amounts thereof, and

processing parameters, which fall within the scope of the instant claims, in the process of Solc because these combinations of ingredients, amounts thereof, and processing parameters are encompassed by Solc and would have been expected to give a product having the properties described by the Patentee. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the initiator of the instant claim 8 because it is encompassed by the initiator species disclosed by Solc and is a well known free radical initiator.

6. Claims 1-7 and 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 4421660 Solc nee Hajna.

Solc nee Hajna discloses a method falling within the scope of the instant claims at the abstract; column 1, lines 41-68; column 2, lines 1-68; column 3, lines 1-68, particularly 37-63; column 4, lines 1-68; column 5, lines 1-54, particularly lines 20-21; and the remainder of the document.

Solc nee Hajna is silent regarding the many "characteristic features" of the instant claims. However, it would appear, based on the colloidal nature of the dispersed inorganic substance and its physical nature, along with the other similarities to the instantly claimed process of the emulsion polymerization of Solc nee Hajna, that these "characteristic features" are necessarily inherent to the process of the patentee. The resulting products and uses thereof fall within the scope of the instant claims 10-13.

7. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 4421660 Solc nee Hajna.

Solc nee Hajna discloses a method falling within the scope of the instant claims at the abstract; column 1, lines 41-68; column 2, lines 1-68; column 3, lines 1-68, particularly 37-63; column 4, lines 1-68; column 5, lines 1-54, particularly lines 20-21; and the remainder of the document.

Solc nee Hajna is silent regarding the many "characteristic features" of the instant claims. However, it would appear, based on the colloidal nature of the dispersed inorganic substance and its physical nature, along with the other similarities to the instantly claimed process of the emulsion polymerization of Solc nee Hajna, that these "characteristic features" are necessarily inherent to the process of the patentee. The resulting products and uses thereof fall within the scope of the instant claims 10-13.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the combinations of ingredients, amounts thereof, and processing parameters, which fall within the scope of the instant claims, in the process of Solc nee Hajna because these combinations of ingredients, amounts thereof, and processing parameters are encompassed by Solc nee Hajna and would have been expected to give a product having the properties described by the patentee. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the initiator of the instant claim 8 because it is encompassed by the initiator species disclosed by Solc nee Hajna and is a well known free radical initiator.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Niland whose telephone number is

(571) 272-1121. The examiner can normally be reached on Monday through
FrThursdayrom 10 a.m. to 5 p.m.


If attempts to reach the examiner by telephone are unsuccessful, the
examiner's supervisor, Vasu Jagannathan, can be

reached on (571) 272-1119. The fax phone number for the organization where
this application or proceeding is assigned is (703) 872-9306>

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is (703) 308-
0661.

pn

January 21, 2004


Patrick Niland
Primary Examiner
Art Unit 1714